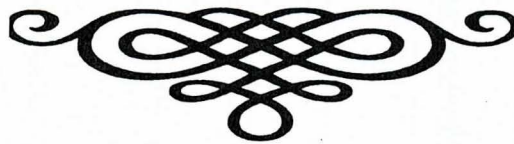Final Report

of the

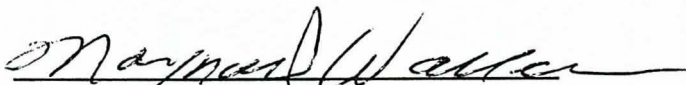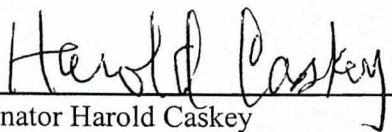# Joint Interim Committee on Education

February 15, 2004
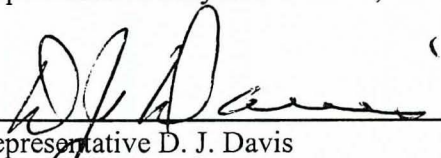
TO THE PRESIDENT PRO TEMPORE
OF THE SENATE
AND THE SPEAKER
OF THE
HOUSE OF REPRESENTATIVES
OF THE NINETY-SECOND GENERAL ASSEMBLY
OF THE STATE OF MISSOURI

Your Joint Interim Committee on Education begs leave
to submit the following report:

Senator Charlie Shields, Chair
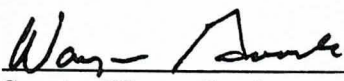
Representative Maynard Wallace, Co-Chair

Senator Harold Caskey
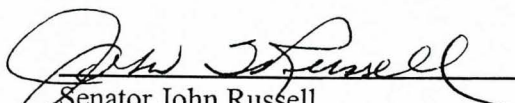
Representative D. J. Davis

Senator Doyle Childers

Representative Barbara Fraser
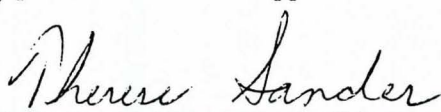
Senator Wayne Goode

Representative Bob Johnson

Senator John Russell

Representative Scott Rupp

Senator Steve Stoll

Representative Therese Sanders

Senator Anita Yeckel

Representative Sue Schoemehl

The signatures of the members of the Joint Interim Committee should not be construed as an endorsement of any plan or option, or element of a plan, referred to within the text of the report or appended to the report. Their signatures signify their agreement with the findings section of their report.

Members of the Joint Interim Committee on Education

Senate	House
Charlie Shields, Chair	**Maynard Wallace, Co-chair**
Harold Caskey	**D. J. Davis**
Doyle Childers	**Barbara Fraser**
Wayne Goode	**Bob Johnson**
John Russell	**Scott Rupp**
Steve Stoll	**Therese Sander**
Anita Yeckel	**Sue Schoemehl**

Staff

Senate	*House*
Don Thalhuber	**Rebecca DeNeve**
Paul Wagner	**Mark Schwartz**
Eva Rich	**Judy Rohrbach**
Chris Roepe	

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Appendices:
   A.   **Dr. R.C. Wood's slide show/ text of full final report**
   B.   **Dr. John Augenblick's slide show/text of report and subsequent suggestions for the Committee's consideration**

Committee Activities

September 2, 2003
The committee first met in Jefferson City. This meeting reviewed the basics of school finance in Missouri with the help of Chris Straub of the Missouri School Board Association, Gerri Ogle of the Department of Elementary and Secondary Education, John Jones of the Missouri State Teachers Association, and Otto Fajen of the Missouri National Education Association.

September 9, 2003
The committee met in Jefferson City to hear Dr. Ed Robb, an economist, explain his proposal regarding alterations to state property and income tax structures.

October 9 and 10, 2003
The committee met in St. Joseph and heard testimony from Dr. John Augenblick regarding the adequacy study his firm supplied for the Missouri Education Coalition for Adequacy, the main provisions of which assert that Missouri needs to spend an additional $913 million above what was spent in FY 2002 in order to fund Missouri's public schools adequately. The study suggests that $5,428 is needed as a base amount per pupil, before adjustments for such variables as special education, at-risk, English as second language, etc.

The committee met on the morning of October 10, 2003, and voted to issue a request for proposals in order to hire a consultant to aid the committee with legal and quantitative research. The RFP was issued the following week, and after one deadline extension and RFP modification, the committee received four responses.

October 28, 2003
The committee met in Cape Girardeau and heard testimony from Otto Fajen and John Jones regarding changes that had been made to the existing formula since its inception and changes that might be considered to improve equity and adequacy while retaining the basic structure of the existing formula.

October 29, 2003
The committee met in St. Louis and heard testimony from Senator Michael Gibbons regarding the activities of the Joint Interim Committee on Tax Policy because much of that committee's work has relevance to the JIC on Education. Further, the committee voted to hire Dr. R.C. Wood & Associates, based in Gainesville, Florida, with assistance from associates in Denver and Kansas City, as the committee's consultant.

November 12, 2003
The committee met in Springfield and heard testimony from Alex Bartlett, attorney for the Committee for Educational Equality. Mr. Bartlett outlined the specifics of the lawsuit his committee is preparing to file. The suit will charge that the current formula is both inequitable and inadequate and therefore

violates Article IX, Section 1 of the Missouri Constitution. The committee also heard testimony from its consultants, Dr. Wood and Stephen Smith, regarding issues and perspectives on education finance.

December 2, 2003
The committee met in Jefferson City with Dr. Wood and Stephen Smith to discuss in more detail the policy considerations involved in a formula change, ideas on improved efficiency in the use of resources through pooled purchasing and other methods (covered in Part III of Dr. Wood's final report), and to agree upon a schedule for completing the Committee's charge. The committee also heard from Quentin Wilson, the Commissioner of Higher Education, about Missouri's funding gap in higher education and what plans were proposed for higher education institutions to continue their missions with substantially flat funding for at least the next year.

At all of the hearings with the exception of the December 2, 2003 meeting, the committee heard public testimony from stakeholders, mainly school superintendents, about the negative effects of the recent reductions in school funding.

January 6, 2004
The committee met in Jefferson City to hear formula change options presented by Dr. Wood. At this meeting Dr. Wood covered the concepts of a change in the guaranteed tax base, elimination of the proration factor, and described himself as "wrestling" with what to do about line 1b of the formula. He detailed options concerning funds for student characteristics by collapsing the deductibility of flow-through state funds and redirecting them. His goals were to provide continuity with the SB 380 formula and a clear understanding of potential pathways to get from the current formula to a more student-focused formula. He spent some time describing how hold-harmless could operate under a changed formula, with the guiding principle to permit districts to remain hold-harmless while providing incentives to leave hold-harmless status. Once hold-harmless status changes, a district could not go back, unlike the current formula where districts "on the edge" may be held harmless one year and back on the formula the next. The committee approved a short preliminary report of its work, generated by Senate and House staff.

January 22, 2004
At this meeting in Jefferson City, the committee heard in considerably more detail the options described at the earlier January meeting, with the concept of what to do with line 1b worked out more fully. Equity measures had been run on the options and by all measures, the options increased statistical equity. The short-term goal to raise the floor was based on the assumption of remaining with a $2.75 minimum levy, no new revenues, and putting more "recycled" funds into districts with economically disadvantaged students. The poverty weight factor was more than doubled, from .2 to .5. The ideas of chartering districts, addressing the St. Louis Special School District and federal lands, and possible changes to K-8 districts, were taken out of the discussion for now. The committee gave Dr. Wood direction for the final draft of his report.

January 26, 2004

The committee met to hear from Dr. John Augenblick and his associate Justin Silverstein, concerning the work they have been doing for more than a year with the Missouri Education Coalition for Adequacy. Dr. Augenblick had presented an adequacy study in February 2003 for MECA based on two methodologies, the professional judgment approach and the successful school model. Dr. Augenblick developed two alternatives to generate the additional moneys required to raise funding to the level of adequacy as determined in the study. Approach A maintains the current $2.75 minimum levy and would require the state to provide the difference between what a district's $2.75 levy provides and the adequacy level. This could result in a drop of $400 million in local property taxes but an overall increase of state aid by $1.475 billion. Approach B lets the state and districts share the additional investment required for adequate funding, but requires a minimum levy of $3.44, resulting in a state share of an additional $710 million.

February 5, 2004

The committee heard a more detailed report from Dr. Wood, in conjunction with the presentation of the draft version of his final report. The committee spent most of its time discussing the implications of implementing various options. The format of the final committee report was decided--a short report with findings, <u>not an endorsement of any one plan or option.</u> A summary of Dr. Wood's plan follows the Findings section of this report.

Committee Charge

The relevant portion of Senate Concurrent Resolution 16 states that the Joint Interim Committee on Education will:

> conduct an in-depth study concerning all issues relating to equity and adequacy of distribution of state school aid, teachers' salaries, funding for school buildings, and overall funding levels for schools and any other education-related issues the committee deems relevant; and . . . prepare a report, together with its recommendations for any legislative action it deems necessary for submission to the General Assembly prior to the commencement of the Second Regular Session of the Ninety-second General Assembly.

Findings

- **The Joint Interim Committee recommends exploring a change in the basic philosophy of the school funding formula from a tax-rate-driven basis to a cost/need/student-driven basis. However, some members feel strongly that it is important to maintain the basic elements of a reward-for-effort formula.**

  The state's current formula is based on "reward for effort," which at the time SB 380 was enacted in 1993 was a practical choice to provide incentive for districts that had historically been reluctant to raise their levies . However, the legal, political, and economic landscapes have changed sufficiently in the last eleven years that a change in underlying principles is also warranted. A cost/need/student-driven basis for the formula moves the focus from a district's economic capacity and places it on student characteristics. This centers the policy discussion on how to get the right resources to each district based on the students' needs rather than the capacity of their parents and the community to provide for them.

- **The Joint Interim Committee acknowledges the perception of inconsistent property tax assessments across the state and further acknowledges that a school aid formula that depends on property taxes and property values is disadvantaged when it rests on a foundation that many people do not believe is fair and consistent.**

  Many of the current complaints about school funding can be traced to anomalies in Missouri's property tax system. Residential versus commercial, suburban versus rural, documented versus formulaic valuation, elected versus appointed assessors—all these conflicts contribute to complexity of the public perception. Eventually, the perception and the reality must meet in a system that most people trust. Dr. Wood briefly addresses this in his report.

- **The Joint Interim Committee recognizes that district size has multiple effects on the delivery of services and on students' ability to benefit from services. Changes to the formula need to be sensitive to the difference between "small by choice" and "small by necessity."**

  Proponents of small districts know that a school building may be the economic and social heart of a community—closing a school may lead to the death of a small town. Missouri has many small districts, some of which are small by choice and some of which are small by necessity. Dr. John Augenblick noted that district size occasionally affects student outcomes in ways that are not intuitive or expected. The development of a sparsity index for the districts that are small by necessity could help districts that have compelling reasons for being small. Missouri is not alone in this--as of this writing, Arkansas is struggling with the consolidation of districts as an outgrowth of school finance litigation.

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- **The Joint Interim Committee recognizes that the basic option developed by Dr. R. C. Wood and Associates is a classic depiction of a zero-sum game. When the same amount of resources must be redistributed, no way exists to avoid creating losers and winners.**

The Joint Interim Committee gave Dr. Wood two operating principles:

1. Assume the same level of appropriations for FY 05 as for FY 04.

2. Redesign the formula to improve its equity and adequacy.

Using the traditional statistical measures of equity, the basic option provides significant increases in statistical equity, based on redirecting existing resources to the districts with the poorest students. The simulations of gains and losses show that a majority of students in the state attend schools in districts that would receive less basic state aid overall. In some instances, the decrease in the amount per pupil would be minimal; in others, it would have quite an impact. In particular, the so-called "urban fringe" areas are hardest hit, and as of this writing, a method to make finer distinctions between districts that may be geographically close to each other but demographically very different has not been developed.

While the improvement in equity is a goal of the Joint Interim Committee, the Committee also realizes that asking parents to accept that their child will get less so another child can get more is asking more than most parents could agree to. It is one thing to contemplate a theory; it is another to agree to changes that could negatively affect people we know.

Dr. Wood developed a set of options that fulfilled his charge, and in doing so, has advanced the discussion of several policy questions. His options redirect existing state funds, primarily through stopping the flow-through of certain state moneys through the deduction lines in the current formula and stepping down the hold-harmless payment by five percent each year. He does not suggest taking locally generated property tax revenues and redirecting them outside the district.

- **Dr. Wood's final report offers other options based on the possibility of adding revenues to the FY04 level.**

Dr. Wood provided simulations based on capping state aid for what the current formula calls line 1b at $3.00, $3.25, and $3.50. These alternatives call for the addition of $107 million, $193 million, and $264 million respectively. One measure of the effectiveness of a formula is a small (or at least diminishing) number of hold-harmless districts over time. Under the basic option, there would be 151 hold-harmless districts at a cost of $413.67 million for hold-harmless district aid. Under the additional revenue options, the number of hold-harmless districts falls to 105, 70, and 49 out of 524, and the cost of hold-harmless aid falls to $291.82 million, $191.56 million, and $115.35 million. The statistical measures of equity improve and

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the average amount per student grows from $5,648 for the base proposal to $5,957 for the $3.50 cap level. However, even with the addition of $264 million, there would be losers.

- **The Joint Interim Committee appreciates the difficulty involved in determining what constitutes an adequate level of funding with sufficient sensitivity to student characteristics in individual districts.**

  The Joint Interim Committee heard testimony from Dr. John Augenblick, who was retained by the Missouri Education Coalition for Adequacy to determine what adequate funding would be. When Dr. Augenblick spoke to the Joint Interim Committee in late January 2004, he indicated that at least $710 million would be needed overall and offered conceptual frameworks to achieve that goal. (More details of his presentation are included under the January 26, 2004, meeting summary.)

  Comparatively speaking, it is easier to determine equity statistically than it is to determine adequacy, but most citizens have a better innate understanding of adequacy than they do of equity. A parent may not be able to calculate whether his child is getting a fair share of state resources, but parents know when their children don't have textbooks or have had a series of substitute teachers instead of a permanent one.

  The statistical measures of equity have been developed and in use among professionals for many years, but methodology for adequacy is more recent. The professional judgment model of adequacy routinely generates a higher figure than the successful school model. The successful school model assumes that what works in one district under one set of conditions would be likely to work in others, which may or may not be true. Statistical models of adequacy may be more accurate than either of the above methods, but could have the same public perception problems that equity studies do. Dr. Wood analyzes the strengths and weaknesses of adequacy studies generally in Part II of his report.

- **The consultant's final report provides a formidable "to-do" list in terms of developing additional measures that would improve the equity and adequacy of the school aid formula.**

  A "sparsity" index has been mentioned in an earlier paragraph, but other indices would be required. Of these, the "comprehensive cost index" is of paramount importance. Such an index would calculate and make adjustments for the cost of doing school business in differing locations throughout the state. The pre-SB 380 formula had a similar index, which remained on the books but was not utilized because of the interpretation of another element in that formula that took priority. Dr. Wood's report cautions that while housing costs are a key component, they are far from the only component that needs to be considered. He also recommends a capital funding element, which would need further study. His report details the future research needed on teacher recruitment and the use of other poverty indices besides the free and

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reduced price lunch count. To move the current formula towards these measures will take time and study.

- **The Joint Interim Committee's experience shows the validity of the received truths about changing a school funding formula.**

The general "wisdom" about school funding formulas has these key elements:

1. The shelf life of a formula is usually about ten years.
2. The impetus to consider a formula change almost always comes from a judicial mandate.
3. Finding additional moneys to make formula changes acceptable is the usual method to achieve "leveling up." Without "leveling up," large numbers of students could attend schools receiving less money.

The SB 380 formula is in its eleventh year of operation. It has been amended numerous times. On January 6, 2004, a suit was filed in the circuit court of Cole County alleging the inequity and inadequacy of the state's current school funding formula. The General Assembly and the citizens of Missouri remain divided about the necessity of additional funding.

- **The Joint Interim Committee believes that the complexity of the issue of school funding makes further work necessary and highlights the value of continuity.**

The Joint Interim Committee requests that it be reconstituted to develop the policy discussion further or, as an alternative, that the quadrennial statutory joint committee on education, to be appointed pursuant to section 160.254, RSMo., contain substantially the same membership as this Joint Interim Committee.

Summary of Dr. R.C. Wood and Associates Final Report

INTRODUCTION/BACKGROUND

The current foundation formula effectively improved the equity of Missouri's educational system from 1993 until about 2000. At this point the state began to lose ground as appropriations began falling short of full funding. A major factor contributing to this erosion of equity is that the underfunding of the formula has a disproportionate impact on mid-sized, high poverty/low taxable wealth districts. In other words, the disparity between districts in total educational funding has begun to grow. This growing disparity has more to do with tax levies, local property wealth, etc. than it does with any student-based or educational factors.

One additional factor arising from the underfunding of the formula is a sharp increase in the number of hold-harmless districts. The more hold-harmless districts there are, the less equitable the formula is, by common statistical measures of equity.

The **short-term goal** of the proposal is to improve the equity of Missouri's educational funding system without additional revenue.

The **long-term goal** is to move from the current tax-rate driven formula to a formula that is driven by costs/needs/students.

Again, this proposal is based on the assumption that there will be no additional revenues appropriated to the formula.

HOW THE CURRENT TAX-RATE DRIVEN FORMULA WORKS

Missouri's current formula is a tax-rate driven formula, which is sometimes referred to as a reward-for-effort formula designed to benefit those districts willing to tax themselves above the $2.75 minimum. The guaranteed tax base provides an equalizing factor, so that districts with lower assessed valuation will receive proportionately more state aid than a district with the same tax rate and higher assessed valuation. But generally speaking, districts receive more state aid as their local property tax increases, up to a cap of $4.95. Districts that have tax rates exceeding the cap do not receive state aid on the portion of their levy that exceeds the cap.

HOW THE COSTS/NEEDS/STUDENTS DRIVEN FORMULA IS DIFFERENT

The major difference between the two types of formulas is that the tax-rate driven formula sends school aid to districts based on their willingness to tax themselves, while the costs/need/student formula sends school aid on a basis that is more directly related to the needs of the student population. A simple way of thinking about the issue is that tax-rate driven formulas relate more to the characteristics of a district's

taxpayers and costs/need/student formulas relate more to the characteristics of a district's students plus the cost of doing business.

SUMMARY OF PROPOSAL

The main thrust of the proposal is to capture money from several different places in the current formula and redistribute it through the new formula based on factors related to student needs. More specifically, this proposal captures money that is not currently being equalized and distributes it through an equalized formula.

The current formula uses district economic characteristics (primarily the levy and assessed valuation and other income sources) to help distribute aid. Districts with low assessed valuation coupled with high levies get the most state support per pupil. The proposal would shift to using primarily student/educational characteristics to help distribute aid.

The proposal continues to use a guaranteed tax base to help direct more money to districts with low assessed valuation per pupil. However, it seeks to break the link between the aid and the levy by redirecting moneys to favor districts with both low assessed values and/or

- high poverty rates; and/or
- English proficiency issues; and/or
- high special education needs; and/or
- any other factors chosen by the General Assembly.

IMPLICATIONS OF THE SWITCH TO A COSTS/NEEDS/STUDENT DRIVEN FORMULA

In a situation where the same amount of money is divided in a different way, there will be winners and losers. For example, the proposal would send additional revenues to districts that have higher proportions of students from economically disadvantaged families. This is done by increasing the weight of the poverty factor (eligibility for free and reduced price lunch) from 20/30% or 22% in the current formula (depending on the levy), to 50%. In this example, it would be typical for urban core, urban fringe, and rural areas to benefit. Suburban areas with high levies and low poverty rates would get comparatively less per pupil (in the absence of other mitigating factors).

What this translates to in practical terms is an infusion of funds into districts that have a higher than average free and reduced price lunch population (or English proficiency issues or special education costs, etc.). Under the current formula, proportionately more of these moneys would go to higher-levy districts; under the proposal, the levy no longer impacts the distribution. If a district with a high levy had a high proportion of FRPL students, it would get more money. If a district with a low levy had a lower proportion of such students, it would get less money, all other things being equal.

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As of the writing of this report, the effects of the proposals on "urban fringe" districts are monolithic, in that the proposal only addresses poverty (through the free and reduced price lunch count). Urban fringe districts vary considerably from each other, and the presence of large numbers of limited English proficiency students or the use of poverty measures such as district median income could make a difference in how the aid for these districts is calculated, but those measures would be part of the phase-in plan because they require considerable research to formulate.

NUTS AND BOLTS OF THE PROPOSAL

The basic components of the proposed formula for year 1 include:

- Guaranteed tax base = 151,200

  Currently the growth of the GTB is indexed to increases in statewide assessed valuation. The proposal suggests not only setting the GTB at 151,200 initially, but to index it to growth in state and local revenue so that it more closely tracks with government's ability to fund increases.

- Base levy = 2.75

- Poverty weight = 50%

  Current poverty weight ranges from 20% to 30%

- No multiplier on summer school attendance

  Summer school attendance is currently doubled with an upper limit of 5% of total ADA.

- Use actual rather than recalculated levy

- Lines 3, 4, 8, and 9 of deductions are collected to the state

CHANGES TO THE 2-TIERED APPROACH

Currently. Missouri's current formula has had a very basic two-tiered approach since 1998 when SB 781 split line 1 and line 14 into two parts. This split only impacts the funding distribution when the formula is underfunded, by the use of the proration factor. When full funding is not appropriated, lines 1a and 14a get priority, resulting in proportionately deeper cuts from districts with levies exceeding the $2.75 minimum.

Additionally, the current "tier 2" (lines 1b and 14b) allows districts to access additional state money up to the $4.95 limit with no adjustments. This is changed in the proposal.

The Proposal. The proposed formula eliminates the proration factor and the tiered approach in the "Base" or "Basic" option. Thus, the basic option provides state matching aid only on $2.75 of local tax effort. Any local levy above $2.75 would not leverage additional state aid. Dr. Wood also presents three additional options that would provide state aid against levies of up to $3.00, up to $3.25, and up to $3.50. Each of these requires additional state appropriations above the current level.

PROPOSED FIRST TIER. The first tier, like the current line 1a, seeks to address the basic costs of achieving whatever performance outcomes the General Assembly decides upon in districts with average characteristics. Cost adjustments are then made based on student needs and district needs.

Student needs could include economic disadvantage, which has traditionally been measured by a student's eligibility for free and reduced price meals, English language proficiency, and disabilities, especially those that occur frequently and are not severe.

District needs, which are currently spoken to by categorical funding, are redefined to accommodate such factors as very large or very small districts' special needs because of their size and whether a district is sparsely populated. This is also the aspect of the formula that would help to adjust for the difference in the cost of doing business in different parts of the state, the largest component of which would likely be teacher wages.

The report suggests that factors be phased in over a three to five year period. The actual numbers and simulations presented in the report only incorporate a factor for economic disadvantage (a poverty weight of 0.50). The current proposal, and its financial simulations, does not make any adjustments for ESL issues, special education, high costs of living, density/sparsity, etc.

PROPOSED SECOND TIER. The options presented beyond the base option, like the current line 1b, let districts have the choice to supplement their state aid by exceeding the $2.75 minimum levy. Dr. Wood presents options with accompanying data for caps of $3.00, $3.25, and $3.50.

IMPLICATIONS OF THE NEW 2-TIER APPROACH

Each of these options significantly improves statistical equity measures compared to the base option. Each also requires additional state resources - $107 million for the $3 cap; $193 million for the $3.25 cap; and $264 million for the $3.50 cap.

The proposal also mentions the eventual development of a more refined "Tier II" of school districts that would have the local option to supplement with matching aid from the state (adjusted for capacity and cost). Under the current formula there is no incentive in terms of state money if a district exceeds the $4.95 maximum levy. Under the proposal, a district's maximum levy (meaning the level above which it cannot draw down additional state aid) would be adjusted downward, through a formula calculation that doesn't yet exist, for its capacity, primarily its local wealth per pupil, and upwards for its costs – local market rate for teacher salaries, for example. Different districts would have different maximums based on student and district characteristics, rather than just a set $4.95 maximum for all.

Typically, a district with high capacity will also have a higher cost. An example might be a suburban district with a solid tax base and correspondingly higher teacher salaries. Thus, for some districts, there may not be a major shift in the bottom line numbers of the second tier. However, districts with high local wealth per pupil, and/or low student/district need factors, would not benefit from having levies above $2.75 to the extent that they do under the current formula. Yet either way, under the proposal, state funds tied to higher levies would be distributed based on a district's ability to pay for programs and unique cost issues it may face, rather than primarily on the levy itself.

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RAISING THE FLOOR

Missouri history. The approach taken in 1993 with Senate Bill 380 was called "leveling up," which is roughly the same concept as what the proposal calls "raising-the-floor". Senate Bill 380 "leveled up" by using an infusion of new revenue. Additionally, the current formula has been supported by consistent increases in general revenue appropriations beyond the SB 380 revenue. The formula also benefitted from other revenue from new fund sources including gaming and lottery, and the desegregation settlement.

The proposal seeks to achieve similar results without an infusion of new revenue. Rather than taking a "Robin Hood" approach, sometimes referred to as a recapture, where local money is taken from the district that generates it and is redistributed to less prosperous or more needy districts, "raising-the-floor" takes the approach of bringing up the level of resources in the districts with the greatest need (and "need" is now expressed more in terms of student characteristics than district wealth).

In order to raise-the-floor without new revenues, funds have to be taken from somewhere within the current system and redirected.

WHERE DOES THE PROPOSAL FIND REVENUE TO SHIFT?

The proposal recaptures revenue from several places and distributes it through the new formula as described above, in order to improve the statistical equity in Missouri's funding system without raising additional revenue. The following are the sources of redirected revenues.

HOLD-HARMLESS CHANGE Under the no-additional-revenues constraint, one of the sources of funds comes from a redefinition in how the hold-harmless payment is calculated. Instead of being set at a level that stays constant from year to year, it would be redefined to become 95% of last year's level. For example:

FY 2004 hold-harmless payment: $1,000 per student

FY 2005   950

FY 2006   902.50

FY 2007   857.37

Over a period of time, what are commonly referred to as "less wealthy" hold-harmless districts would gradually be weaned off hold-harmless and onto the formula.

Net gain, first year: $53 million

SCHOOL CORPORATIONS (previously referred to as CHARTER DISTRICTS) Districts that receive 7.5% or less of their budget from state aid (the current average is about 51%) and that have a high enough assessed valuation that would let them replace the lost state aid with a tax increase of less than twenty cents would be eligible to become school corporations. A school corporation would give

up basic state school aid in return for regulatory relief, predicated on continued acceptable academic achievement. These would be the wealthiest hold-harmless districts.

Net gain, first year: $8.75 million

<u>"COLLAPSING" DEDUCTIONS</u> Currently, various moneys that flow through the state and back to school districts are then deducted from the entitlement amount for each district in calculating state aid payment amounts. The proposal would take some of these – the intangible taxes, railroad and utility assessments, Fair Share, and textbook funds – and redirect them back into the common state pot (i.e. through the formula), to help raise-the-floor.

Net gain, first year: $129 million if hold-harmless districts retain their deductions

> ► It is important to note that districts currently keep these funds as sources revenue outside of formula payments. Under the proposal these funds would flow through the formula. Thus, the district-by-district simulations do not account for the lost revenue for each district associated with the collapsing of the deductions.

<u>Other sources.</u> The proposal also makes the following changes to capture additional revenue (net gains):

Eliminates the double count of summer school:	$22 million
Uses the actual rather than the equalized levy:	$18 million
Uses the prior year actual assessed value for local effort:	$28 million

TOTAL OTHER SOURCES: **$68 million**

TOTAL AMOUNT OF REDIRECTED REVENUE/SAVINGS: $259 million

> ► The proposal, in terms of cost to the state, does not factor in hold-harmless protection for Kansas City and St. Louis due to desegregation issues. These costs are estimated at $13.3 million.

WHAT IS THE ACTUAL IMPACT OF THE BASE OPTION OF THE PROPOSAL IN TERMS OF EQUITY?

The proposal contains district simulations for the base option and for three scenarios that would involve the addition of state revenues.

The proposal is then tested against the current formula for 2002-03 in terms of equity using several common statistical indicators. The tests show that the proposal makes a significant improvement in all measures compared to the current formula at 2002-03 funding levels. The statistics show that the gap between the highest spending districts and the lowest spending districts is narrowed markedly under the proposed formula.

Additionally, in terms of adequacy, the floor is raised by about 10%, meaning the bottom districts in terms of spending per pupil are benefitted. This is accomplished by primarily redirecting money from the highest spending districts, most of which are currently hold-harmless districts. In his presentation, Dr. Wood specifically placed emphasis on the fact that without revising the hold-harmless situation the proposal would not work. He said that mathematically not enough money could be shifted if hold-harmless payments remained at 100%.

OPTIONS BASED ON ADDITIONAL REVENUES

As mentioned above, the proposal then provides three additional options for illustrative purposes. Each of these runs the same new formula as the base option, but allows districts to receive state aid against levies above $2.75 – options for $3, $3.25, and $3.50 are presented. These options include additional state revenue to meet resulting higher state obligations. The results indicate that as the levy cap is increased and new state revenue increases, the equity and adequacy are improved markedly over the findings of the base option. In terms of equity, the gap between the top and bottom spending districts is narrower. It terms of adequacy, the lowest spending districts are brought up by another 8-10% on average, without further impacts on the top spending districts. Additionally, the number of hold-harmless districts drops sharply as the levy cap is increased and new state revenue increases – from 151 in the base option, to 105 at $3, 70 at $3.25, and 49 at $3.50.

Dr. Wood also presented district-by-district simulations for financial changes associated with the basic proposal and each of the other three options. These simulations were presented in a text spreadsheet form as well as a colored-coded by-district chart.

OTHER ISSUES PRESENTED

The proposal raises several issues to be dealt with over the next few years.

First of these is the **collapsing of the categoricals**. The proposal suggests that in year one several of the categoricals should be folded into the new formula in order to increase the GTB, thus improving the adequacy of the system. It also suggests that some categoricals (such as remedial reading) should be folded into the formula to increase the poverty adjustment. It suggests that some other categoricals, such as transportation, special education, and vocational education, should remain flow-throughs in year one pending a later policy choice.

The proposal suggests the addition of a nominal placeholder for some kind of **capital outlay formula** to be developed at a later time.

The proposal touched on several areas that would need extensive further statistical analysis within 3-5 years. These include the development of a **"comprehensive cost index"** to gain some understanding of what is would cost to educate a student with some of several characteristics in a school with some of several characteristics. Part of this would be an analysis of what the relative costs of teacher recruitment and retention are in each district.

The proposal also suggests extensive analysis of **costs associated with particularly large or small districts**, and districts that are very sparsely populated.

Lastly, the proposal suggests **considering using economic and demographic data to predict local student needs** (poverty, language issues, disabilities) rather than relying on district headcounts.

Appendix A
Dr. R.C. Wood's slide show/ text of full final report

Financing Missouri's Public Elementary & Secondary Schools: Preliminary Report

R. C. Wood & Associates

Dr. Craig Wood, President

Consultants to State & Local Education Finance Policy Makers

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Principal Investigators

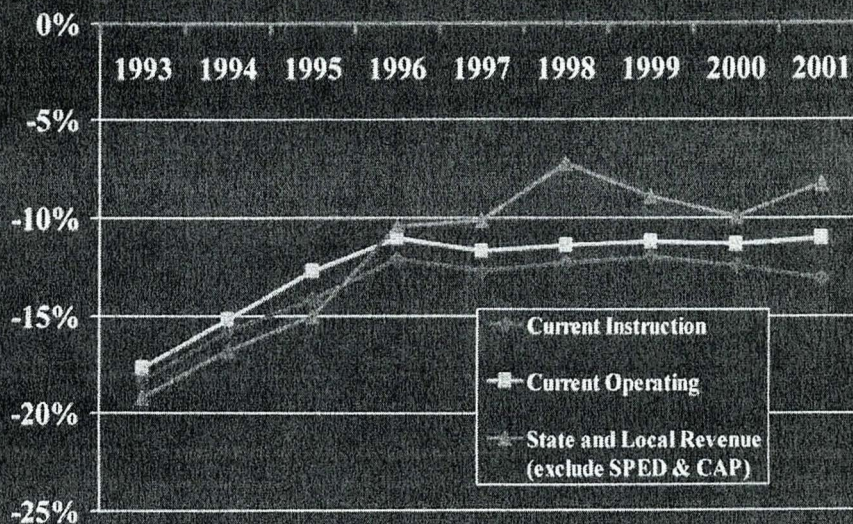Dr. Craig Wood, University of Florida

Dr. Bruce Baker, University of Kansas

Steven Smith, National Conference of State Legislatures

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Missouri v. U.S. Growth (All K-12 Districts)

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Missouri v. U.S. Growth (Large K-12 Districts)

Missouri v. U.S. Growth (Small K-12 Districts)

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Coefficient of Variation from 1993 – 2001
U.S. Census Fiscal Survey
©R. C. Wood & Associates

Coefficient of Variation from 1994 – 2003
Missouri DESE Formula Generated Revenues
Per Funding Eligible Pupil
©R. C. Wood & Associates
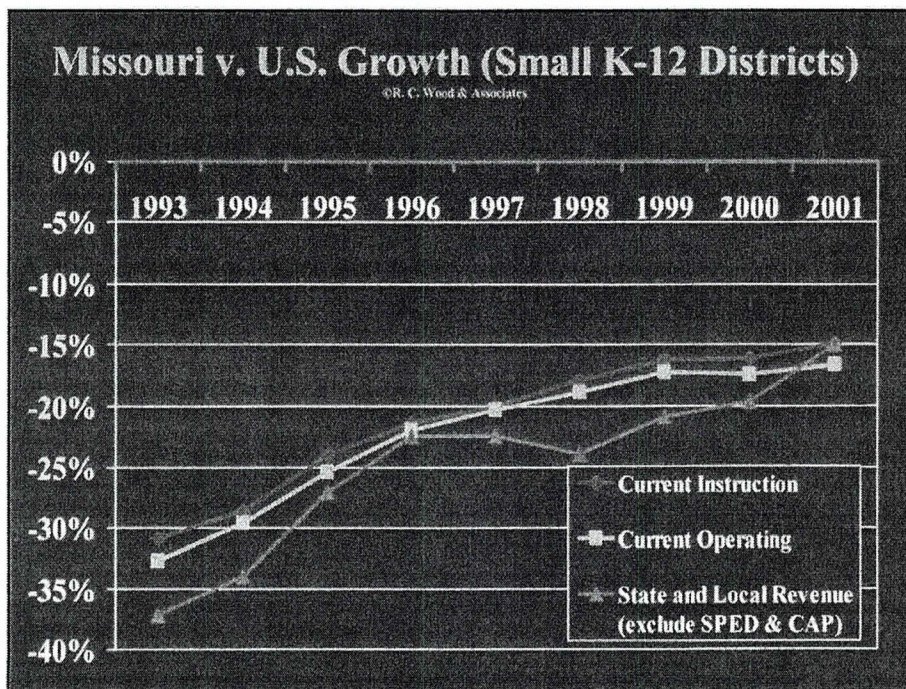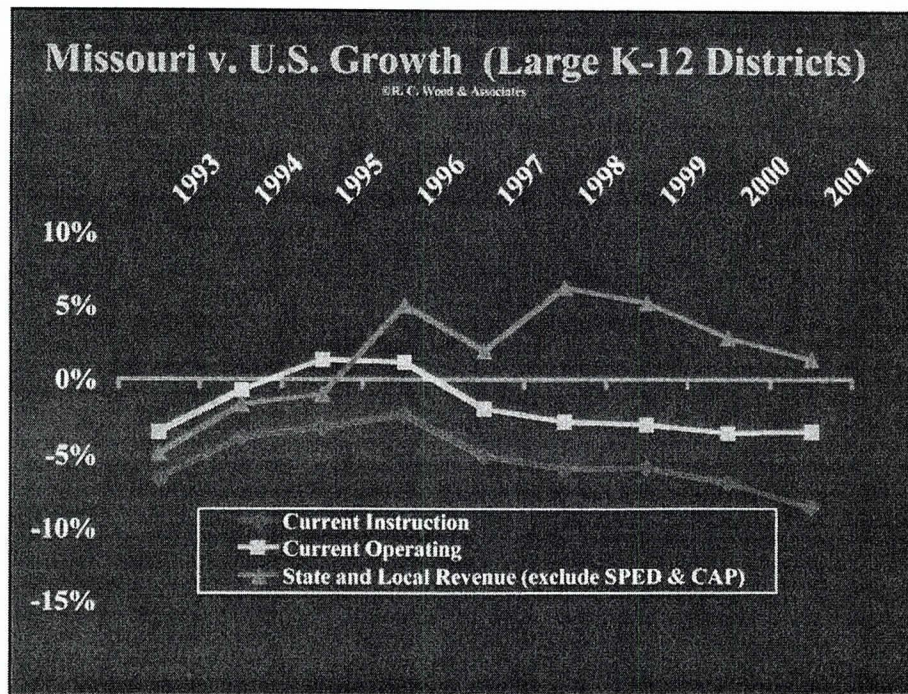
Summary of Trends & Issues

- Significant improvements to equity through 1990s with some backsliding from 1999 – 2003
- Improvements to fiscal neutrality in the 1990s with some recent backsliding
- Current Major GAPS in Funding
  - Small to midsized districts, especially those with higher poverty and lower taxable wealth
    - Consists of small, poor rural and poor urban fringe
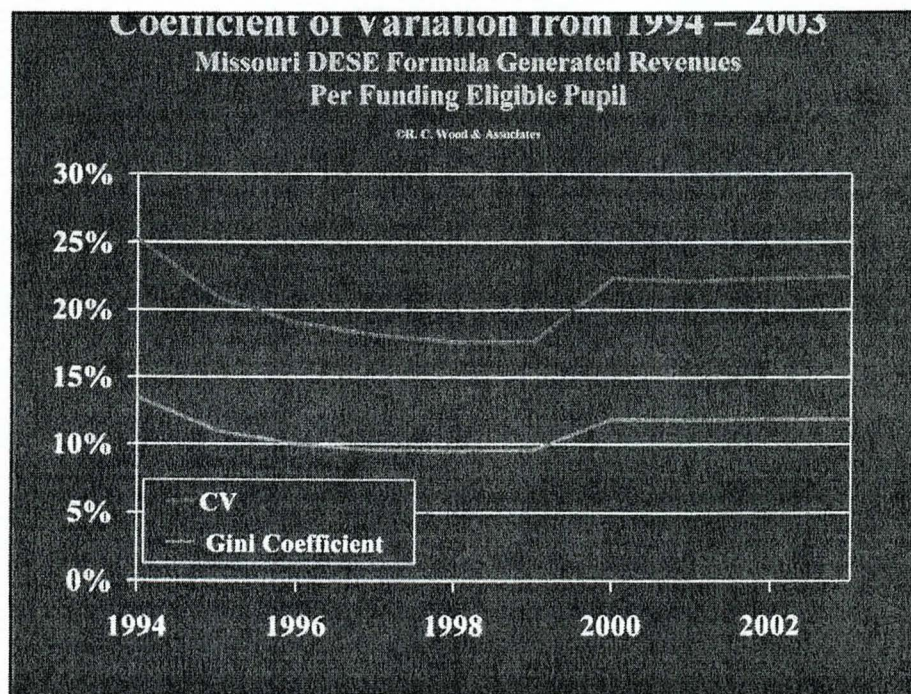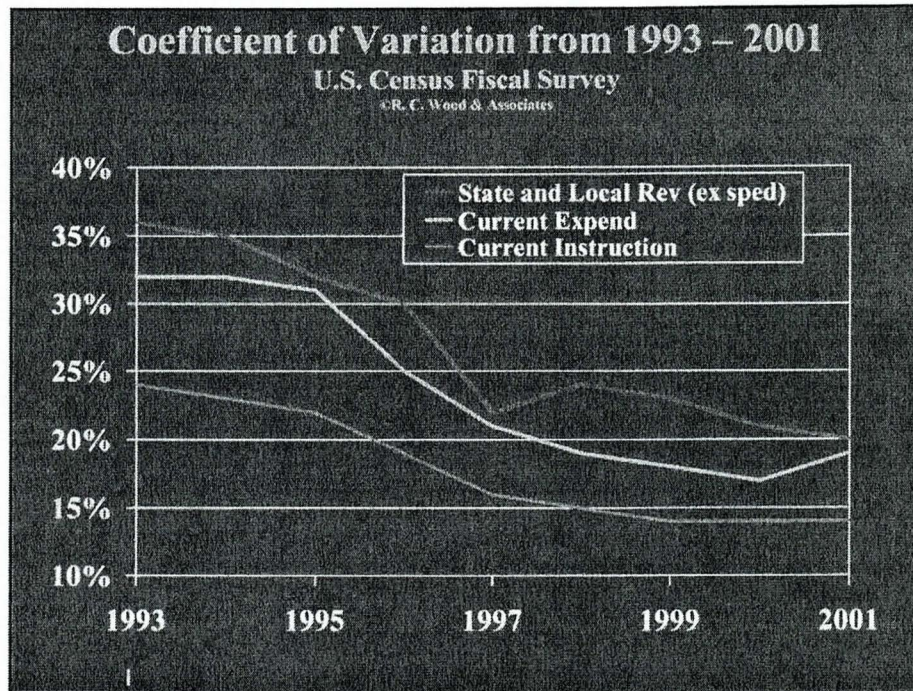
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Long Term Goal: Basic Concept
From Tax Rate Driven to Cost/Need/Student Driven Aid

- Tier I: Cost adjusted general education aid per pupil
  - Basic (Median) Cost = Cost of achieving desired performance outcomes in district of average characteristics
  - Cost adjustments (to general aid formula)
    - Student Needs
      - Economic Disadvantage
      - Language Proficiency Status
      - High Incidence/Low Severity Disability
    - District Needs
      - Economies of scale & sparsity
      - Geographic variations in competitive market prices (teacher wages etc.)
- Tier II: Local option to supplement with matching aid from state (adjusted for capacity & cost)

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Short Term Goal: Raising the Floor
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*elimination of proration factor = (2.75/100 x 147,022)
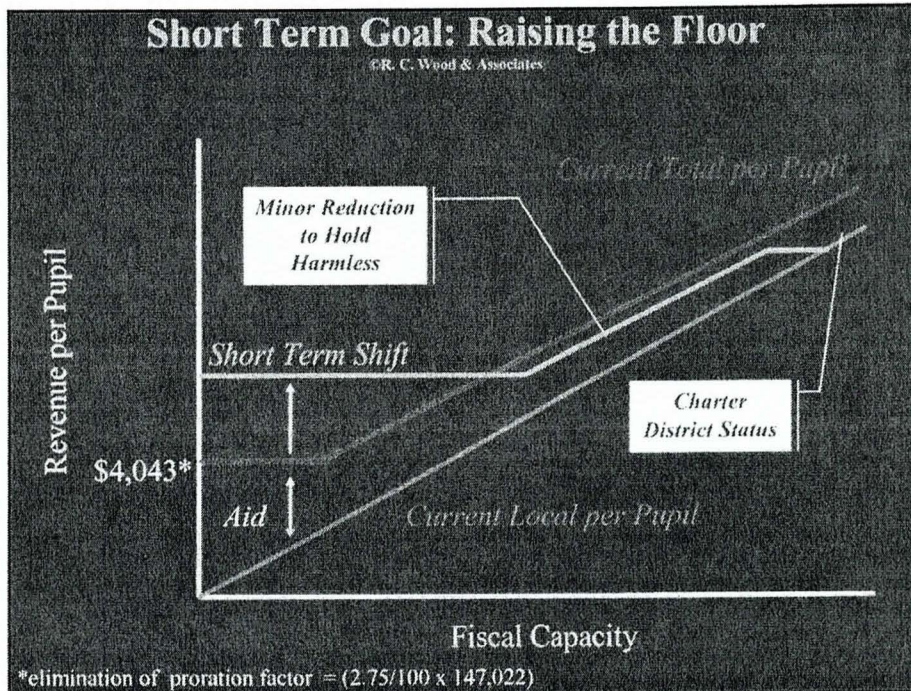
Option I: Hold Costs Constant at 2002 – 03 levels (simulating actual current year '03 – '04)

- Budget Constraint = $ 1.966 billion
  - Total State Aid 2002 – 2003
  - Exclusions: Charter districts, federal lands, St. Louis special district
- Major Parameters
  - GTB = 151,200
  - Base Levy = 2.75
  - Poverty Weight = 50%
  - Elimination of Proration factor
- Other Changes
  - Revert to 1.0 x Summer ADA (net gain = $22 million)
  - Prior year actual assessed value for local effort (net gain = $28 million)
  - Actual rather than equalized levy (net gain = $18 million)
  - Line 3,4,8,9 of deductions collected to state (net gain = $129 million)

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Option I: Hold Costs Constant at 2002 – 03 levels (simulating current year 2003 – 04)

- Other changes (cont'd)
  - Hold Harmless set at retaining 95 % of 2002 – 2003 state aid
    - Net gain = $ 53 million.
  - Charter district status eligibility
    - Districts with <7.5 % of budget from state general aid & for which the cost of making up that difference is <20cents of additional local levy
      - Net gain = $8.75 million

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Costs of Option I
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Revenue Generated by Deductions		
Line 3: Intangible	$	38.17
Line 4: RR and Util	$	112.84
Line 5:	$	-
Line 6: Impact Aid	$	-
Line 7: Prop C	$	-
Line 8: Fair Share	$	22.43
Line 9: Textbook	$	70.09
Total Revenue from Recollected Deductions	$	243.53
Total State Cost with HH (retain deduct)	$	**2,101**
Total State Cost with HH (distrib deduct)	$	**2,220**
State Cost Less Deduction Redistribution	$	**1,976**
Total State Cost Less Charter	$	**1,967**
Total State Aid 2002 - 03	$	**1,966**
Dollar Change from 2002 - 03	$	**0.88**
Percent Change		**0.04%**

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Related Costs of Option 1

Related Costs of Hold Harmless 95 % of 02-03 Data

Number of HH districts (redistribute deducts) = #151

Costs of HH harmless (redistribute deducts) = $ 414 million

Urban Safety Valve Costs = $ 13.36 million
(costs of protecting St. Louis & KC against loss)
(not included)

Local Taxes Required to Offset HH Reduction
Max Rate to Offset $ 0.99
Mean Rate to Offset $ 0.09

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Equity Changes (option 1)

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Equity Output

	2002 - 03		New Formula	
Mean	$	5,570	$	5,648
Stdev	$	1,181	$	984
CV		21%		17%
95%ile		$8,082	$	7,789
5%ile		$4,178	$	4,625
FRR		0.93		0.68
McLoone		0.88		0.93
GINI		0.12		0.09

Option I: Revenue Changes
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Changes in Aid by Wealth
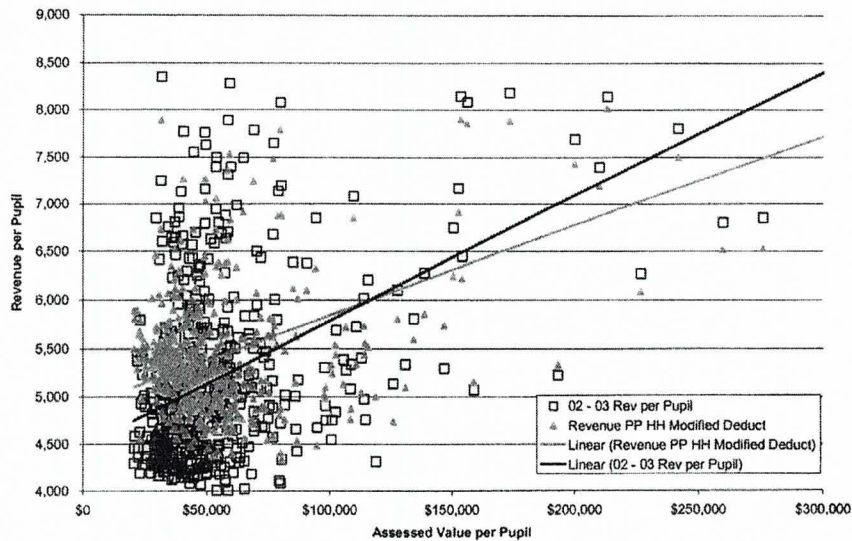
Base Case II: At 2002 – 03 Formula with Full 1.0 Proration on 1a & 1b (cost of $2.219 billion)
© R. C. Wood & Associates

Major Formula Factors			Revenue Generated by Deductions		
GTB	$ 147,022		Line 3: Intangible	$	-
Tier I Base Rate	$ 2.75		Line 4: RR and Util	$	-
Line 14b GTB	$ 119,138		Line 5:	$	-
Poverty Weight	20%		Line 6: Impact Aid	$	-
Line 14b Poverty Weight	30%		Line 7: Prop C	$	-
Proration (1a)	1.00		Line 8: Fair Share	$	-
Proration (1b)	1.00		Line 9: Textbook	$	-
Matching Aid Levy Cap	$ 4.95		Total Revenue from Recollected Deductions	$	-
Summer Enrollment			Total State Cost with HH (retain deduct)	$	2,219
Percent to Reduce	0		Total State Cost with HH (distrib deduct)	$	2,219
			State Cost Less Deduction Redistribution	$	2,219
Local Effort Calculation Factors			Total State Cost Less Charter	$	2,219
Assessed Value for Loc. Eff.	1				
(1 = current law, 2 = prior year)			Total State Aid 2002 - 03	$	1,966
Actual or Equalized Levy	1		Dollar Change from 2002 - 03	$	252.51
(1 = equalized, 2 = actual)			Percent Change		12.84%
Deduction Lines	On/Off	Total	Hold Harmless Data (X% of 2002 - 03 State Rev)		
Line 3: Intangible	1	$ 38	Number HH (Retain Deducts)		62
Line 4: RR and Util	1	$ 113	Cost of Hold Harmless (Retain Deducts)	$	49
Line 5:	NA	$ 2	Number HH (Redistribute Deducts)		62
Line 6: Impact Aid	NA	$ -	Cost of Hold Harmless (Redistribute Deducts)	$	49
Line 7: Prop C	NA	$ 326			
Line 8: Fair Share	1	$ 22	Urban Safety Valve Costs		
Line 9: Textbook	1	$ 70	Cost of Protecting KC & St.Louis Against Loss	$	-
Hold Harmless			Local Taxes Required to Offset HH Reduction		
Percent of 02 - 03 Aid to Retain	100		Max Rate to Offset	$	-
			Mean Rate to Offset	$	-
Charter Status		Number	Median Rate to Offset	$	-
Percent State Aid Limit to Qualify	0.0%	0	Maximum State Cost of Matching Increases	$	-
Tax Levy Limit to Offset to Quality	$ -	0			
	Both	0			
	Yield	$ -			

Option II: Proposal
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Major Formula Factors		
GTB	$ 168,000	
Tier I Base Rate	$ 2.75	
Line 14b GTB		
Poverty Weight	50%	
Line 14b Poverty Weight		
Poration (1a)	1.00	
Proration (1b)		
Matching Aid Levy Cap		

Summer Enrollment	
Percent to Reduce	50

Local Effort Calculation Factors	
Assessed Value for Loc. Eff.	2
(1 = current law, 2 = prior year)	
Actual or Equalized Levy	2
(1 = equalized, 2 = actual)	

Deduction Lines	On/Off	Total	
Line 3: Intangible	0	$	38
Line 4: RR and Util	0	$	113
Line 5:	NA	$	2
Line 6: Impact Aid	NA	$	.
Line 7: Prop C	NA	$	326
Line 8: Fair Share	0	$	22
Line 9: Textbook	0	$	70

Hold Harmless	
Percent of 02 - 03 Aid to Retain	95

Charter Status		Number
Percent State Aid Limit to Qualify	7.5%	8
Tax Levy Limit to Offset to Quality	$ 0.20	7
	Both	7
	Yield	$ 8.75

Revenue Generated by Deductions		
Line 3: Intangible	$	38.17
Line 4: RR and Util	$	112.84
Line 5:	$	-
Line 6: Impact Aid	$	-
Line 7: Prop C	$	-
Line 8: Fair Share	$	22.43
Line 9: Textbook	$	70.09
Total Revenue from Recollected Deductions	$	243.53

Total State Cost with HH (retain deduct)	$	2,323
Total State Cost with HH (distrib deduct)	$	2,472
State Cost Less Deduction Redistribution	$	2,228
Total State Cost Less Charter	$	2,219
Total State Aid 2002 - 03	$	1,966
Dollar Change from 2002 - 03	$	252.86
Percent Change		12.86%

Hold Harmless Data (X% of 2002 - 03 State Rev)		
Number HH (Retain Deducts)		132
Cost of Hold Harmless (Retain Deducts)	$	314
Number HH (Redistribute Deducts)		87
Cost of Hold Harmless (Redistribute Deducts)	$	239

Urban Safety Valve Costs		
Cost of Protecting KC & St.Louis Against Loss	$	13.36

Local Taxes Required to Offset HH Reduction		
Max Rate to Offset	$	0.99
Mean Rate to Offset	$	0.05
Median Rate to Offset	$	-
Maximum State Cost of Matching Increases	$	-

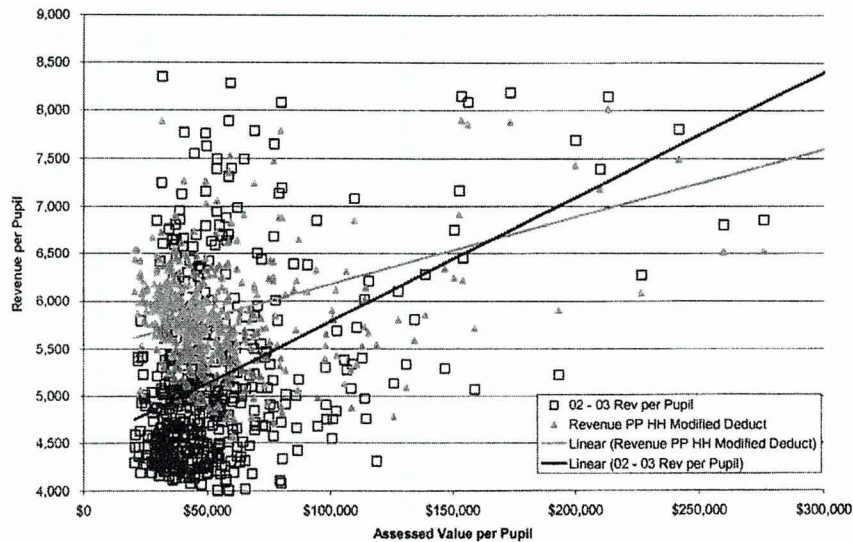## Option II: Equity Outcomes
©R. C. Wood & Associates

Equity Output

	2002 - 03		New Formula	
Mean	$	5,570	$	5,944
Stdev	$	1,181	$	856
CV		21%		14%
95%ile		$8,082	$	7,789
5%ile		$4,178	$	4,979
FRR		0.93		0.56
McLoone		0.88		0.94
GINI		0.12		0.07

Option II: Revenue Changes
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Changes in Aid by Wealth

Legend:
- □ 02 - 03 Rev per Pupil
- ▲ Revenue PP HH Modified Deduct
- Linear (Revenue PP HH Modified Deduct)
- Linear (02 - 03 Rev per Pupil)

Y-axis: Revenue per Pupil
X-axis: Assessed Value per Pupil

Components To Be Phased In
(e.g., 3 - 5 Years)

- Categorical Funding in yr 1
  - Group 1: Fold into general to increase GTB
  - Group 2: Fold into general to increase poverty adjustment in yr. 1
    - E.g., Remedial reading
  - Group 3: Flow thru's in yr. 1 (Phase out/in in new formula)
    - Special Education
    - Transportation
    - Vocational
    - Beginning of Capital Outlay Formula

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Phase In Analysis (3-5 Years)

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- Statistical analysis for "Cost Adjusted Tier I Aid"
  - Development of "comprehensive cost index" measuring "relative cost to achieve adequate outcomes in a school with X,Y, & Z characteristics, serving students with A,B, & C characteristics."
    - Rigorous empirical analysis to determine the relative cost to each district of recruiting teachers of comparable quality
      - NCES index fails in this regard
      - Housing cost indices using district level data insufficient
    - Rigorous empirical analysis of costs associated with scale and sparsity (and policy considerations regarding districts small by necessity and districts small by choice)
    - Evaluation of the use of U.S. Census & other Missouri economic demographic data to predict local student needs (poverty, language proficiency & mild/mod disability) rather than relying on district headcount
      - May reduce headcount incentives that often occur in need based aid formulas   Δ2-22-04Δ

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